

Listing of Claims

1. (Currently Amended) A method of selecting a transmission antenna in a packet transmission system having multiple antennas, comprising:

transmitting a data block through a first one of a plurality of sequentially selected antennas;

receiving a first signal indicating that an error occurred during transmission or reception of the data block;

interrupting sequential selection of the plurality of antennas to select a second one of the plurality of antennas in response to the first error signal; ~~and~~

retransmitting the data block through the second one of the plurality of antennas, wherein the data block is retransmitted in consecutive sequence with an additional data block initially transmitted by the second one of the plurality of antennas;

resuming sequential selection of the plurality of antennas after the data block is retransmitted through the second one of the plurality of antennas; and

transmitting additional data blocks through the sequentially selected antennas.
2. (Previously Presented) The method of claim 1, wherein the first error signal indicates whether a receiver correctly received the data transmitted through the first one of the plurality of antennas.

3. (Canceled)

4. (Previously Presented) The method of claim 1, wherein the first error signal is a non-acknowledgment signal transmitted from a receiver.

5. (Canceled)

6. (Previously Presented) The method of claim 1, further comprising transmitting a consecutive sequence of additional data blocks through the second one of the plurality of antennas.

7. (Previously Presented) The method of claim 6, further comprising:
receiving a second error signal indicating that one of the additional data blocks was transmitted or received in error; and

interrupting the consecutive transmission of the additional data blocks in response to the second error signal; and

transmitting one or more subsequent data blocks through a third one of the plurality of antennas, wherein the third one of the plurality of antennas is same as the first antenna or is different from the first antenna and the second antenna.

8-10 (Canceled)

11. (Previously Presented) The method of claim 1, wherein transmission and retransmission of the data block are downlink transmissions.

12. (Previously Presented) The method of claim 1, wherein transmission and retransmission of the data block occurs through a mobile communication system.

13. (Previously Presented) The method of claim 12, wherein an open loop transmit diversity technique is used to transmit data in the mobile communication system.

14. (Previously Presented) The method of claim 13, wherein the open loop transmit diversity technique is a TSTD (time switched transmit diversity) technique.

15. (Previously Presented) The method of claim 1, wherein the first error signal is received based on an ARQ (automatic repeat request) from a receiver.

16. (Currently Amended) A method of selecting a transmission antenna in a packet transmission system having multiple antennas, comprising:

transmitting a data block to a receiver through a first antenna;

checking a first response signal of the receiver; and

if the first response signal is a retransmission request signal, retransmitting the data block through a second antenna, wherein the data block is retransmitted in consecutive sequence with an additional data block initially transmitted by the second antenna;

resuming sequential selection of the plurality of antennas after the data block is retransmitted through the second antenna; and

transmitting additional data blocks through the sequentially selected antennas.

17. (Previously Presented) The method of claim 16, further comprising:

sequentially selecting the multiple antennas including the first antenna and the second antenna, said sequential selection taking place before the first response signal is checked.

18. (Canceled)

19. (Previously Presented) The method of claim 16, further comprising transmitting a consecutive sequence of additional data blocks through the second antenna.

20. (Previously Presented) The method of claim 19, further comprising:

receiving a second response signal indicating that one of the additional data blocks was transmitted or received in error; and

interrupting the consecutive transmission of the additional data blocks in response to the second response signal; and

transmitting one or more subsequent data blocks through a third antenna, wherein the third antenna is same as the first antenna or is different from the first antenna and the second antenna.

21-23 (Canceled)

24. (Previously Presented) The method of claim 16, wherein transmission and retransmission of the data block are downlink transmissions.

25. (Previously Presented) The method of claim 16, wherein an open loop transmit diversity technique is used to transmit data in the mobile communication system.

26. (Previously Presented) The method of claim 25, wherein the open loop transmit diversity technique is a TSTD (time switched transmit diversity) technique.

27. (Previously Presented) The method of claim 16, wherein the first response signal is received based on an ARQ (automatic repeat request) from a receiver.

28. (Original) The method of claim 27, wherein the response signal is ACK or NACK signal according to ARQ.

29. (Canceled)